Application No.: 10/544,182

Art Unit: 1791

LIST OF CURRENT CLAIMS

1. (Currently Amended) A security paper for producing value documents,

exemplified by bank notes, passports or identification documents, comprising a flat

substrate provided at least partly with a dirt-repellent protective layer for extending

the life time and fitness for circulation, wherein the protective layer comprises at least

two lacquer layers, a first lower one of said lacquer layers being formed by a

physically drying liquid lacquer layer, which becomes a solid by drying out a carrier

fluid, applied to the substrate which makes contact with the substrate therebelow and

closes its pores, and a second upper one of said lacquer layers protecting the substrate

from physical and chemical influences.

2. (Previously Presented) The security paper according to claim 1, wherein the

substrate is formed by an unprinted or printed cotton paper.

3. (Previously Presented) The security paper according to claim 1, wherein the lower

lacquer layer forms a smooth and contiguous layer on the substrate.

4. (Currently Amended) The security paper according to claim 1, wherein the first

lower lacquer layer is elastic so as to at least avoid cracks from forming therein

through mechanical motions.

(Previously Presented) The security paper according to claim 1, wherein the

first lower lacquer layer is formed by a water-based dispersion lacquer layer.

6. (Previously Presented) The security paper according to claim 1, wherein the first

lower lacquer layer comprises a polyurethane.

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7. (Previously Presented) The security paper according to claim 1, wherein the first lower lacquer layer is based on a water-based dispersion of aliphatic polyester

polyurethanes or styrene-acrylic polyurethanes.

8. (Previously Presented) The security paper according to claim 1, wherein the

second upper lacquer layer is formed by a radiation-curing and/or physically drying

lacquer layer.

9. (Currently Amended) The security paper according to claim 8, wherein each the

second upper lacquer layer is selected from the group consisting of a UV-crosslinked

lacquer layer, a water-based dispersion lacquer layer and a hybrid lacquer layer.

10. (Previously Presented) The security paper according to claim 1, wherein the

second upper lacquer layer comprises silicones and/or wax.

11. (Previously Presented) The security paper according to claim 9, wherein the UV-

crosslinked lacquer layer is based on an acrylate system, the water-based dispersion

lacquer layer on a styrene-acrylic system, and the hybrid lacquer layer on a system

comprising aliphatic urethane acrylates and acrylates with photoinitiators.

12. (Currently Amended) The security paper according to claim 8, wherein the

composition of the upper lacquer layer is selected with respect to brittleness and

surface tension so as to obtain a predetermined haptics of the security paper, in

particular a predetermined smoothness, sound-and/or flexural stiffness.

13. (Previously Presented) The security paper according to claim 1, wherein the

second upper lacquer layer is disposed directly on the first lower lacquer layer.

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14. (Previously Presented) The security paper according to claim 1, wherein a further

lacquer layer comprising water-based dispersion lacquer is disposed between the

second upper and first lower lacquer layers.

15. (Previously Presented) The security paper according to claim 1, wherein the

lacquer layers of the protective layer are conditioned with each other in their adhesion

properties so as to form a highly resistant bond.

16. (Canceled)

17. (Previously Presented) The security paper according to claim 1, wherein either or

both the second upper and first lower lacquer layer is transparent and colorless.

18. (Previously Presented) The security paper according to claim 1, wherein the

second upper lacquer layer has antibacterial fungus proofing.

19. (Currently Amended) The security paper according to claim 1, wherein the

first lower lacquer layer is present on the substrate in a coating weight of from 1 to 6

g/m², preferably 2 to 4 g/m².

20. (Currently Amended) The security paper according to claim 1, wherein the

first upper lacquer layer is present on the substrate in a coating weight of from 0.5 to 3

 g/m^2 , preferably 1 to 2 g/m^2 .

21. (Previously Presented) The security paper according to claim 1, wherein one or

more of the substrate, first lower lacquer layer and second upper lacquer layer are

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printed with characters or patterns, and wherein in the case where the substrate is printed, the protective layer comprising said first lower and said second upper lacquer layer is applied directly to said printed substrate, and in the case where the first lower lacquer layer is printed, the second upper lacquer layer is applied directly to said

printed first lower lacquer layer.

22. (Previously Presented) The security paper according to claim 1, wherein the

protective layer contains at least one gap.

23. (Currently Amended) The security paper according to claim 22 [[21]], wherein

the gap has a security element incorporated therein.

24. (Currently Amended) The security paper according to claim 1, wherein the

protective layer is applied to the entirety of the flat substrate all over.

25. (Previously Presented) The security paper according to claim 1, wherein the flat

substrate is provided with the dirt-repellent protective layer on its two main faces.

26. (Previously Presented) A value document, exemplified by a bank note, passport

or identification document, comprising security paper according to claim 1.

27. (Withdrawn - Currently Amended) A method for producing a security paper in

particular for a value document, exemplified by a bank note, passport or identification

document, comprising the following steps:

a) supplying a flat substrate;

b) applying a dirt-repellent protective layer to the substrate, the protective

layer being applied by

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b₁) applying a physically drying <u>liquid</u> lacquer layer, <u>which</u> <u>becomes a solid by drying out a carrier fluid</u>, to the substrate as a first lower layer of the protective layer to make contact with the substrate therebelow and close its pores; and

b₂) applying a second upper layer of the protective layer to protect the substrate from physical and chemical influences.

- 28. (Withdrawn) The method according to claim 27, wherein
 - b₂) the second upper layer applied is either or both a radiationcuring and physically drying layer, and
 - the second upper layer is crosslinked, cured and/or dried by irradiation with electromagnetic radiation.
- 29. (Withdrawn) The method according to claim 27, wherein the flat substrate supplied is a printed or unprinted cotton paper.
- 30. (Withdrawn Currently Amended) The method according to claim 27, wherein the first lower layer applied is an elastic material so as to at least avoid cracks from forming therein through mechanical motions.
- 31. (Withdrawn) The method according to claim 27, wherein the first lower lacquer layer is applied in an amount of coating which closes the pores of the substrate and forms a smooth and cohesive surface on the substrate.
- 32. (Withdrawn Currently Amended) The method according to claim 27, wherein the first lower lacquer layer is applied to the substrate in an amount of from 2.5 to 15 g/m², preferably 5 to 10 g/m² (wet weight).

33. (Withdrawn) The method according to claim 27, wherein the first lower layer is

dried prior to application of the second upper layer.

34. (Withdrawn) The method according to claim 27, wherein the second upper

lacquer layer applied is a UV-crosslinking lacquer layer, a water-based dispersion

lacquer layer or a hybrid lacquer.

35. (Withdrawn - Currently Amended) The method according to claim 27,

wherein the composition of the second upper lacquer layer is selected with respect to

brittleness and surface tension so as to obtain a predetermined haptics of the security

paper, in particular a predetermined smoothness, sound-and/or flexural stiffness.

36. (Withdrawn) The method according to claim 27, wherein a printed image is

printed on the substrate prior to application of the protective layer.

37. (Withdrawn) The method according to claim 27, wherein a printed image is

printed on the first lower lacquer layer after application of the first lower lacquer

layer, and/or a printed image is printed on the second upper lacquer layer after

application of the second upper lacquer layer.

38. (Withdrawn) The method according to claim 27, wherein the unlacquered or

lacquered substrate is printed by the intaglio printing process.

39. (Withdrawn) The method according to claim 27, wherein the first lower and/or

second upper lacquer layer is applied by a flexographic printing process.

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40. (Withdrawn) The method according to claim 39, wherein the lacquer layers

applied by a flexographic printing process are applied in an amount of coating of

altogether 3 to 12 g/m².

41. (Withdrawn) A method according to claim 27, wherein the first lower and/or

second upper lacquer layer is applied by a screen printing process.

42. (Withdrawn) The method according to claim 41, wherein the lacquer layers

applied by a screen printing process are applied in an amount of coating of altogether

5 to 15 g/m 2 .

43. (Withdrawn) The method according to claim 27, wherein the first lower and/or

second upper lacquer layer is applied by the offset printing process or by the indirect

letterpress printing process.

44. (Withdrawn - Currently Amended) The method according to claim 27,

wherein the protective layer is applied to the entirety of the substrate all over.

45. (Withdrawn) The method according to claim 27, wherein the flat substrate is

provided with the dirt-repellent protective layer on its two main faces.

6. (Withdrawn) The method according to claim 27, wherein the flat substrate

supplied in step a) is a paper-of-value sheet comprising a plurality of single copies for

which the steps b), b_1) and b_2) are performed in the same run in each case.

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47. (Withdrawn) The method according to claim 27, wherein the first lower and second upper lacquer layers are applied to the substrate in-line in a sheet-fed lacquering machine.